

**NATURAL RESOURCES CONSERVATION SERVICE**  
**CONSERVATION PRACTICE STANDARD**  
**STRUCTURES FOR WILDLIFE**

(No.)

**CODE 649**

**DEFINITION**

A structure installed to replace or modify a missing or deficient wildlife habitat component.

**PURPOSE**

To provide a structure, in proper amounts, locations and seasons to enhance or sustain non-domesticated wildlife. Or, to modify an existing conservation structure that pose a hazard to wildlife.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to all lands where (1) planting or managing vegetation fails to meet the short-term needs of the species or guild under consideration, and (2) where a State-approved wildlife habitat assessment identifies the need to:

- Provide loafing, escape, nesting, rearing, roosting, perching and/or basking habitat. Examples are nesting islands, nesting boxes, roosting boxes, rock piles, perching structures and brush piles.
- Modify an existing conservation structure to minimize the risks of injury or mortality to wildlife. Examples are the need to:
  - i. Retrofit an existing fence with fence markers,
  - ii. Modify an existing fence by removing wire or adding wildlife-friendly wire at appropriate spacing, or
  - iii. Modify an existing watering facility by installing an escape ramp or removing an obstacle that impede safe access to a watering facility.

Do not use this practice to:

- Install new structure or modify an existing structure for the control of nuisance animal species.
- Install new structure or modify an existing structure for the benefit of captive, feral, or domesticated animals.

**CRITERIA**

**General Criteria Applicable to all Purposes**

Construct and install a wildlife structure when the State-approved habitat appraisal method identifies limiting habitat component(s) that cannot be provided within the desired time period with implementation of a vegetative management strategy.

Reference the Oklahoma NRCS Restoration and Management of Rare or Declining Habitats (643), Wetland Wildlife Habitat Management (644), Upland Wildlife Habitat Management (645), and Wetland Restoration (657) standards, Habitat Appraisal Guides, Biology Technical Notes and other sources of information in order to determine species specific and/or ecosystem habitat limitations.

Provide for all components of habitat (food, cover/shelter, water, and space connectivity) to meet Planning Criteria for the targeted specie(s) or habitat. Planning Criteria is not met if any habitat component scores less than 50% of the optimum score for that component on a State-approved habitat appraisal method.

Establish or manage native vegetation to supplement and/or eventually replace installed habitat structures. When establishing vegetation use Oklahoma Conservation Practice Standards for Range Planting (550) and/or Tree/Shrub Planting (612).

Use the following criteria to design, install or modify a structure for wildlife.

- Select the location of the structure to meet the needs of the targeted species, while not subjecting individuals using the structure to increased risks of injury or mortality (e.g. locate nesting structure away from roadway).
- Select materials that are durable and safe for wildlife. Avoid caustic, dangerous, debilitating or irritating materials (e.g. do not use treated lumber for nest box construction).
- Utilize non-toxic ultraviolet resistant materials if the structure is exposed to sunlight.
- Construct a habitat structure to meet the needs of the targeted wildlife and to withstand normal weather conditions for the lifespan of the structure.
- Locate and construct the structure to allow the capability for access, if monitoring, operation or management will be required.

#### **Additional Criteria for Fence Modifications**

- Design fence modification according to Technical Note Biology OK – 35 “Wildlife Friendly Fencing” and/or consult with NRCS Biologist, Resource Conservationist or Oklahoma Department of Wildlife Biologist for species specific recommendations.

#### **CONSIDERATIONS**

Consider the following:

- Potential negative impacts to target species and non-target species through an increase in predation, disease transmission, nest parasitism or other means.
- Modify existing onsite and offsite farm infrastructure that might inhibit safe daily and seasonal movement of wildlife.
- Risks associated with the use of the structure by non-target or nuisance species.

- Safe passage strategies for non-target species including elk jumps, and farm road crossings.
- Modify to the design or placement to inhibit access to the structure by predators.
- Select appropriate color, orientation and exposure to support thermal regulation.
- Design and locate structures to prevent damage by livestock.
- Take appropriate measures to protect structures and inhabitants while conducting prescribed burning. Reference the Oklahoma NRCS Prescribed Burning Standard (338).

#### **PLANS AND SPECIFICATIONS**

Develop plans and specifications that describe the biological and physical requirements for applying the practice.

Specify the number, location, spacing, grade, quantities, dimensions, materials and timing of installation of new or modification of existing structures.

Develop specifications for construction and installation of a habitat structure using the best available science.

#### **OPERATION AND MAINTENANCE**

Provide an operation and maintenance plan that is customary and reasonable for the wildlife structure being installed or modified. Provided the timing, scope and intensity of operation and maintenance, with consideration of the needs of the target and associated species. As a minimum, the O&M will include a schedule (timing, frequency, duration) to:

- Monitor condition and/or usage of the structure.
- Implement adaptive management by relocating, modifying or repairing the structure, as needed during the season with the least disturbance to target species.
- Conduct needed maintenance of the structure, such as removal of old nesting materials, nests of non-target species, or undesirable debris.

- Install, modify and/or monitor during the season of year or time of day to minimize disturbance to wildlife.
- Remove the structure if determined (i.e. upon abandonment) potentially detrimental to the target or non-target species.

## REFERENCES

Paige, C. 2012. A Landowner's Guide to Wildlife Friendly Fences. Second Edition. Private Land Technical Assistance Program, Montana Fish, Wildlife & Parks, Helena, MT. 56 pp.

USDA, Natural Resources Conservation Service and Wildlife Habitat Council. 2008. Artificial Nesting Structures. Fish and Wildlife Habitat Management Leaflet No 20 (revised) Washington, D.C.